



# Microwave antenna UNI3-18

## Antenna description

High Performance  $\varnothing$  0.90 m antenna for ALCOMA point to point radiorelay links with holder for precise horizontal and vertical alignment.

## General parameters

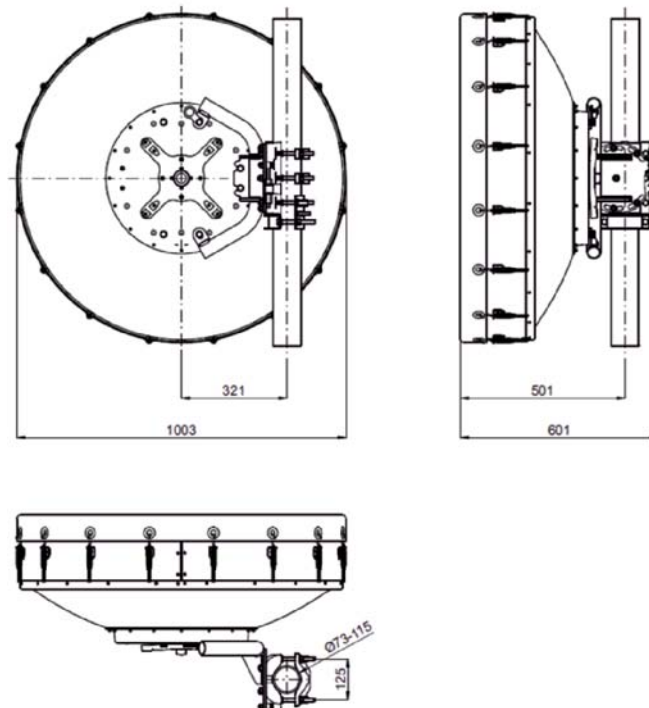
Diameter	0.90 m (3 ft.)
Feeder	single polarized (dual polarized)
Polarization	horizontal / vertical (dual)
Input flange: - standard - optional	circular, hole diameter 11.56 mm IEC UBR220
Environmental temperature	-35 °C to +55 °C
Color	light grey
Radom material	white plastic canvas

## Electrical parameters

Frequency band	17.700 - 19.700 GHz
Gain: - low band	41.6 dBi
- mid band	42.1 dBi
- high band	42.5 dBi
Beamwidth (-3 dB)	1.1° (H / V)
Return loss	< 1.20 (20.0 dB)
Front to Back Ratio	63 dB
Cross Polarization Discrimination	32 dB
Antenna class	2 (ETSI EN 302 217-4-2)



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# ALCOMA



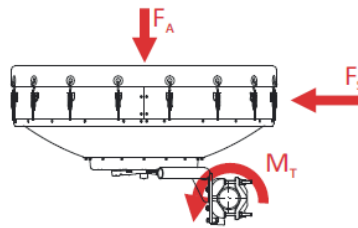
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## Mechanical parameters due to wind

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Performance stability	max 30 m/s (110 km/h)
Survival	max 55 m/s (200 km/h)
Radial ice load (density 7kN/m <sup>3</sup> )	25 mm
Net weight (interface A/R)	26.0 kg
Pipe diameter*	73 - 115 mm
Adjust azimuth / elevation	±180° / —
Fine adjust azimuth	±7°
Fine adjust elevation	±15°

## Force and twisting moment due to wind



Wind velocity	30 m/s	55 m/s
$F_A$ - axial force	500 N	1850 N
$F_s$ - side force	180 N	570 N
$M_T$ - twisting moment	200 Nm	640 Nm
Icing thickness 25 mm	430 N	